

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of November 19, 2003 is respectfully requested.

Claims 20-75 are presently pending in this application. However, the Examiner is requested to note that non-elected claims 20-28, 34-47, and 53-69 have now been cancelled as indicated above.

With respect to the remaining elected claims, the Examiner has rejected claims 29, 31, 48, and 70 as being unpatentable over the Moriyama reference (USP 5,609,511) in view of the Sato reference (JP 10/335288); and has rejected claims 32, 49, 50, 71, 72, and 74 as being unpatentable over the Moriyama reference and the Sato reference, and further in view of the Adams reference (USP 6,395,130). However, in item 5 of the Office Action, the Examiner has indicated that dependent claims 30, 33, 51, 52, 73, and 75 contain allowable subject matter. Consequently, the elected claims have now been amended as explained below. For the reasons discussed below, it is respectfully submitted that elected claims 29-33, 48-42, and 70-75 are now clearly patentable over the prior art of record.

As an initial matter, allowable dependent claims 30 and 33 have each been placed in independent form so as to include the subject matter of base independent claim 29. In addition, allowable dependent claims 51 and 52 have each been placed in independent form so as to include the subject matter of base independent claim 48. Furthermore, allowable dependent claims 73 and 75 have each been placed in independent form so as to include the subject matter of base independent claim 70. Therefore, in view of the Examiner's indication of allowable subject matter, it is respectfully submitted that amended independent claims 30, 33, 51, 52, 73, and 75 are now in condition for allowance.

Independent claims 29, 48, and 70 have now been amended to clarify the relationship between the distal end of the nozzle (i.e., the conduit) and the distal end of the at least one optical fiber. In particular, each of these independent claims has been amended to recite that the distal end of the nozzle is closer to the film than the distal end of the at least one optical fiber. Because the subject matter incorporated into independent claims 29, 48, and 70 was previously recited in dependent claims 49, 50, 71, and 72, the Examiner has presumably searched for and considered this

subject matter. Consequently, it is submitted that the amendments to independent claims 29, 48, and 70 do not raise any new issues and, therefore, should be entered and considered by the Examiner at this time despite the finality of the previous Office Action.

As explained above, each of independent claims 29, 48, and 70 now recite that the distal end of the nozzle (i.e., the conduit) is closer to the film than the distal end of the at least one optical fiber. This arrangement is shown in, for example, Figures 1, 2, 4, and 11 of the present application, which illustrate that the distal end of jet nozzle 5 is closer to the film 2 of substrate 1, 33 than the distal end of optical fibers 7, 8, 39 (see page 16, line 19 through page 17, line 34 of the original specification in this regard). Because the nozzle is used to form and direct the jet of light-transmitting liquid towards the film, this particular arrangement allows the jet of light-transmitting liquid to be reliably formed with stability so that the film thickness can be accurately measured.

With respect to the amendment to independent claims 29, 48, and 70 as discussed above, the Examiner asserts that the Adams reference teaches that the polishing pad 109 is closer to the film than the distal end of the optical fiber 113, and that it would have been obvious to one of ordinary skill in the art to include this arrangement in the device of the Moriyama reference as modified by the Sato reference because such an arrangement would prevent damage to the distal end of the fiber. However, the Examiner's position in this regard is respectfully traversed.

The Adams reference discloses an optical fiber 113 extending through a canal 104 in a pad backer 120, and into a through-hole 112 formed in polishing pad 109. Although the distal end of the optical fiber 113 is recessed from a surface of the polishing pad 109, the Adams reference does not even disclose a nozzle or a conduit. In this regard, the Examiner is requested to note that independent claims 29, 48, and 70 also recite that the nozzle (i.e., conduit) is arranged so as to form a gap between the distal end of the conduit and a plane of the polishing surface, and *this* feature is provided in order to prevent damage to the distal end of the fiber or to the surface of the film. In this regard, the Examiner asserts that the Moriyama reference teaches that such a gap is formed between a distal end of the nozzle and the plane of the polishing surface. Thus, because *this* arrangement prevents damage to the distal end of the fiber in the present invention and the Moriyama reference, it is submitted that one of ordinary skill in the art would not be motivated to combine the Adams

reference with the Moriyama reference and the Sato reference as suggested by the Examiner because the benefit supposedly achieved by such a combination (as suggested by the Examiner) is already achieved based on the teachings of the Moriyama reference.

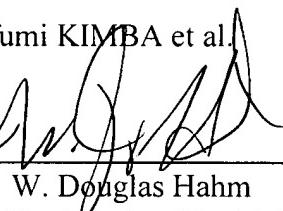
Moreover, as explained above, the Adams reference does not even disclose at least one optical fiber arranged within a nozzle (i.e., a conduit). Therefore, it is submitted that the Adams reference also clearly does not disclose or suggest the arrangement of a distal end of the nozzle with respect to the distal end of the at least one optical fiber, as recited in amended claims 29, 48, and 70. Therefore, it is submitted that one of ordinary skill in the art would not be motivated by the Adams reference to modify the Moriyama reference or the Sato reference or to combine the references so as to obtain the invention recited in amended independent claims 29, 48, and 70. Accordingly, it is respectfully submitted that amended independent claims 29, 48 and 70, and the claims that depend therefrom, are clearly patentable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. However, if the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the Applicant's undersigned representative.

Respectfully submitted,

Toshifumi KIMBA et al.

By:


W. Douglas Hahm
Registration No. 44,142
Attorney for Applicants

WDH/gtg
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
March 19, 2004